

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. - 8. (Cancelled)

9. (New) An image processing apparatus of correcting the color of a predetermined range of a pixel signal for each pixel included in an input image signal, comprising:

target color setting means of setting a target color depending on which the color of said pixel signal is corrected, and

color conversion means of carrying out correction to make the color of said pixel signal coincident with or close to said target color by using said pixel signal, information of identifying a photographic scene by also using information, other than pixel information, included in said pixel signal, and said target color.

10. (New) An image processing apparatus of correcting the color of a predetermined range of a pixel signal for each pixel included in an input image signal, comprising:

target color setting means of setting a target color depending on which the color of said pixel signal is corrected, and

color conversion means of carrying out correction to make the color of aid pixel signal coincident with or close to said target color by using the luminance component in the color of said pixel signal, two chromaticity components excluding said luminance component in the color of said pixel signal, and said target value, wherein

said color conversion means determines said correction degree by using not only said two chromaticity components of said pixel signal to be corrected but also said luminance component of said pixel signal to be corrected.

11. (New) The image processing apparatus in accordance with claim 9, wherein said color conversion means comprises:

intensity determination means of generating a correction intensity that is small on the periphery of the color region of said specific range set on the basis of two chromaticity components excluding the luminance component in the color of said pixel signal and large in the vicinity of the central portion of said region,

correction degree setting means of setting a correction degree by also using information, other than pixel information, included in said pixel signal, and

correction means of making the color of said pixel signal coincident with or close to said target color depending on said correction intensity having been generated and said correction degree having been set, wherein

said correction degree setting means sets said correction degree by identifying at least an image photographing scene according to said input image signal.

12. (New) An image processing apparatus in accordance with claim 10, wherein said color conversion means comprises:

intensity determination means of generating a correction intensity that is small on the periphery of the color region of said specific range set on the basis of the luminance component and the two chromaticity components excluding said luminance component in the color of said pixel signal and large in the vicinity of the central portion of said region, and

correction means of making the color of said pixel signal coincident with or close to said target color depending on said correction intensity having been generated.

13. (New) An image processing apparatus in accordance with claim 12, wherein said intensity determination means comprises:

first function generation means of outputting a candidate of a first correction intensity for said luminance signal,

second and third function generation means of outputting candidates of second and third correction intensities for said two chromaticity components, respectively, and

synthesizing means of synthesizing the candidates of said first, second and third correction intensities and outputting the result as said correction intensity.

14. (New) The image processing apparatus in accordance with claim 12, wherein said intensity determination means comprises:

first function generation means of outputting a candidate of a first correction intensity for said luminance signal,

two-dimensional function generation means of outputting a second correction intensity on the basis of a two-dimensional function typified by an ellipse using said two chromaticity components, and

synthesizing means of synthesizing the candidates of said first and second correction intensities and outputting the result as said correction intensity.

15. (New) The image processing apparatus in accordance with claim 12, wherein said intensity determination means comprises:

first function generation means of outputting a candidate of a first correction intensity for said luminance signal,

first polar coordinate conversion means of converting said two chromaticity components into a hue signal and a saturation signal,

second function generation means of outputting a candidate of a second correction intensity for said hue signal,

third function generation means of outputting a candidate of a third correction intensity for said saturation signal, and

synthesizing means of synthesizing the candidates of said first, second and third correction intensities and outputting the result as said correction intensity.

16. (New) The image processing apparatus in accordance with claim 11 or 12, wherein said correction means corrects each of said two chromaticity components to a value obtained when each of said two chromaticity components and two target chromaticity values output from said target color setting means are internally divided depending on said correction intensity.

17. (New) The image processing apparatus in accordance with claims 11 or 12, wherein

said correction means has a second polar coordinate conversion means of converting said two chromaticity components into a hue signal and a saturation signal and said saturation signal output from said second polar coordinate conversion means to a value obtained when said hue signal and said saturation signal and the target hue signal and the target saturation signal output from said target color setting means are internally divided depending on said correction intensity.

18. (New) The image processing apparatus in accordance with claim 11 or 12, wherein

said intensity determination means outputs a hue correction intensity for hue correction and a saturation correction intensity for saturation correction,

said correction means has a second polar coordinate conversion means of converting said two chromaticity components into a hue signal and a saturation signal,

hue correction means of correcting said hue signal having been converted to a value obtained when said hue signal and the target hue value output from said target color setting means are internally divided depending on said hue correction intensity, and

saturation correction means of correcting said saturation signal having been converted to a value obtained when said saturation signal and the target saturation value output from said target color setting means are internally divided depending on said saturation correction intensity.

19. (New) the image processing apparatus in accordance with claim 11, wherein said correction degree setting means determines said correction degree according to said input image signal and photographic information at the time when an input image is taken.

20. (New) The image processing apparatus in accordance with claim 19, wherein said correction degree setting means comprises:

image identification means of identifying the photographic scene of an image according to said input image signal,

photographic information identification means of identifying a photographic scene according to the photographic information at the time when said input image signal is photographed, and

correction degree determination means of determining said correction degree according to the outputs of said image identification means and said image information identification means.

21. (New) The image processing apparatus in accordance with claim 20, wherein said image identification means and said photographic information identification means identify whether a person is included in an image or not.

22. (New) The image processing apparatus in accordance with claim 20, wherein said image identification means and said photographic information identification means identify whether the sky is included in an image or not.

23. (New) The image processing apparatus in accordance with claim 20, wherein said image identification means and said photographic information identification means identify whether green plants are included in an image or not.

24. (New) The image processing apparatus in accordance with claim 9 or 10, comprising:

means of interpolating a three-dimensional look-up table of using three input signals as addresses and outputting three output signals or interpolating two of said three-dimensional look-up tables, wherein

the correspondence relationship of making the color of said pixel signal to correspond to the color corrected using said color conversion means is stored in said three-dimensional look-up table in advance, and

the color of said each pixel signal is corrected using said three-dimensional look-up table.

25. (New) An image processing method of correcting the color of a predetermined range of a pixel signal for each pixel included in an input image signal, comprising:

a target color setting step of setting a target color depending on which the color of said pixel signal is corrected, and

a color conversion step of carrying out correction to make the color of said pixel signal coincident with or close to said target color by using said pixel signal, information of identifying a photographic scene by also using information, other than pixel information, included in said pixel signal, and said target color.

26. (New) An image processing method of correcting the color of a predetermined range of a pixel signal for each pixel included in an input image signal, comprising:

a target color setting step of setting a target color depending on which the color of said pixel signal is corrected, and

a color conversion step of carrying out correction to make the color of said pixel signal coincident with or close to said target color by using the luminance component in the color of said pixel signal, two chromaticity components excluding said luminance component in the color

of said pixel signal, and said target value.

27. (New) The image processing apparatus in accordance with claim 9, comprising a program being used to operate a computer:

target color setting means of setting the target color depending on which the color of said pixel signal is corrected, and

color conversion means of carrying out correction to make the color of said pixel signal coincident with or close to said target color by using said pixel signal, information of identifying a photographic scene by also using information, other than pixel information, included in said pixel signal, and said target color.

28. (New) The image processing apparatus in accordance with claim 10, comprising a program being used to operate a computer:

target color setting means of setting the target color depending on which the color of said pixel signal is corrected, and

color conversion means of carrying out correction to make the color of said pixel signal coincident with or close to said target color by using the luminance component in the color of said image signal, two chromaticity components excluding said luminance component in the color of said pixel signal, and said target value.

29. (New) The image processing apparatus of claims 27 or 28 including a recording medium containing a program, said recording medium being processable using a computer.

30. (New) The image processing apparatus of claims 9 or 10 including a printer comprising:

input means of inputting an image signal,

image processing means of image processing the image signal having been input, and

printing means of printing said image signal having been image processed on paper media.

31. (New) The image processing apparatus of claims 9 or 10 including a television receiver comprising:

receiving means of receiving an image signal being broadcast, and

image processing means of image processing the image signal output from said receiving means, wherein

said image signal having been image processed is displayed on display means.

32. (New) The image processing apparatus of claims 9 or 10 including projector apparatus comprising:

input means of inputting an image signal,

image processing means of image processing the image signal having been input, and

projection means of projecting said image signal having been image processed on a screen.

33. (New) The image processing apparatus of claims 9 or 10 including photographing apparatus comprising:

photographing means of photographing an image, and

image processing means of image processing said image signal output from said photographing means.

34. (New) The image processing apparatus of claims 9 or 10 including a mobile communication terminal comprising:

a wireless communication circuit of outputting broadcast waves to an antenna and of inputting a received signal from the antenna,

image processing means of image processing the image signal included in said received signal, and

display means of displaying said image signal having been image processed.